

ABSTRACT OF THE DISCLOSURE

A flexible process optimizer for recording and analyzing various parameters to improve the efficiency of a production process. The flexible process optimizer acquires and conditions signals from a variety of transducers mounted on a production machine. Through qualitative and quantitative data analysis, specific aspects are of the production process which need improvement are identified. The qualitative evaluation looks at the presence, absence, or duration of certain features of the production cycle as revealed by the sensor data. The quantitative evaluation of data involves the computation of certain data attributes. By providing useful data acquisition and data analysis tools, necessary adjustments are made to the required parameters of the production process to provide improved efficiency. The results of the changes are immediately verifiable using the flexible process optimizer.